CLAIMS

1. (original) A method of classifying a received data frame as belonging to one of a plurality of possible classes, each of said classes having corresponding formats wherein a known bit pattern is located in different respective positions within said data frame, said method comprising:

receiving said frame;

computing a first value representing a confidence-weighted correlation between said known bit pattern and data from a first position of said frame; and

classifying said frame as belonging to a first class or a second class based on said first value.

2. (original) The method of claim 1 further comprising computing a second value representing a confidence-weighted correlation between said known bit pattern and data from a second position of said frame, said second position different from said first position, and wherein classifying said frame as belonging to a first class or a second class is additionally based on said second value.

3. (original) The method of claim 2 wherein classifying said frame as belonging to a first class or a second class comprises computing a ratio of said first value to said second value, and comparing said ratio to a predetermined threshold.

4. (original) The method of claim 2 further comprising calculating a normalized first value by dividing said first value by a measured parameter, and calculating a normalized second value by dividing said second value by said measured parameter, and wherein classifying said frame as belonging to a first class or a second class comprises comparing said normalized first value and said normalized second value to a predetermined function.

5. (original) The method of claim 4 wherein said measured parameter is the maximum of the average received signal strength indicators over the duration of the receipt of said frame, measured at each diversity receiver antenna.

6. (original) The method of claim 4 wherein said predetermined function includes at least one substantially linear segment.

7. (currently amended) The method of claim 1 wherein said first class is a normal burst corresponding to a discontinuous transmission-high (DTX-high) state, and said second class is a truncated burst corresponding to a discontinuous transmission-low (DTX-low) state.

8. (currently amended) The method of claim 1 wherein said known bit pattern is a coded digital verification color code (CDVCC).

9. (original) The method of claim 1 wherein computing a first value representing a confidence-weighted correlation between said known bit pattern and data from a first position of said frame comprises calculating the Euclidian distance between said known bit pattern and said data from a first position of said frame.

10. (original) The method of claim 2 wherein computing a second value representing a confidence-weighted correlation between said known bit pattern and data from a second position of said frame, said second position different from said first position, comprises calculating the Euclidian distance between said known bit pattern and said data from a second position of said frame, said second position different from said first position.

11. (original) The method of claim 1 wherein said received data frame is processed in a first manner or in a second manner different from said first manner, based on the classification of said frame as belonging to a first class or a second class.

12. (original) A method of classifying a received data frame as being in one of two possible formats, each said format including a known bit pattern in a different known position, comprising:

determining D1, the Euclidian distance between said known bit pattern and the demodulated soft bits occupying a first position in said received data frame;

determining D2, the Euclidian distance between said known bit pattern and the demodulated soft bits occupying a second position in said received data frame;

calculating the ratio R = D1/D2;

comparing the ratio R to a predetermined threshold value T; and

if R < T, classifying the received data frame as being in the format wherein said known bit pattern occupies said first position; and

if R ≥T, classifying the received data frame as being in the format wherein said known bit pattern occupies said second position.

13. (original) The method of claim 12, wherein the format wherein said known bit pattern occupies said first position is a normal burst corresponding to a discontinuous transmission-high (DTX-high) state, and the format wherein said known bit pattern occupies said second position is a truncated burst corresponding to a discontinuous transmission-low (DTX-low) state.

14. (original) The method of claim 12, wherein said Euclidian distances are calculated after converting said known bit pattern to a format corresponding to said demodulated soft bits.

15. (original) The method of claim 14, wherein said Euclidian distances are calculated as the square root of the summation over the length of said known bit pattern of the square of the difference between said converted known bit and said demodulated soft bit.

16. (original) A method of classifying a received data frame as being in one of two possible formats, each said format including a known bit pattern in a different known position, comprising:

determining D1, the Euclidian distance between said known bit pattern and the demodulated soft bits occupying a first position in said received data frame;

calculating a normalized D1 by dividing D1 by a measured parameter;

determining D2, the Euclidian distance between said known bit pattern and the demodulated soft bits occupying a second position in said received data frame;

calculating a normalized D2 by dividing D2 by said measured parameter; and

classifying said received data frame as being in the format wherein said known bit pattern occupies said first position or in the format wherein said known bit pattern

occupies said second position by comparing said normalized D1 and normalized D2 to a thresholding function.

17. (original) The method of claim 16 wherein said measured parameter is the maximum average RSSI over said received data frame.

18. (original) The method of claim 16 wherein said thresholding function comprises a piece-wise linear function.

19. (original) The method of claim 16 wherein comparing said normalized D1 and normalized D2 to a thresholding function comprises determining if the point (normalized D1, normalized D2) when plotted on a two-dimensional graph with the normalized D1 as the abscissa and the normalized D2 as the ordinate, falls to the right or left of said thresholding function when plotted on the same graph.

20. (currently amended) The method of claim 16, wherein the format wherein said known bit pattern occupies said first position is a normal burst corresponding to a discontinuous transmission-high (DTX-high) state, and the format wherein said known bit pattern occupies said second position is a truncated burst corresponding to a discontinuous transmission-low (DTX-low) state.

21. (original) The method of claim 16, wherein said Euclidian distances are calculated after converting said known bit pattern to a format corresponding to said demodulated soft bits.

22. (original) The method of claim 16, wherein said Euclidian distances are calculated as the square root of the summation over the length of said known bit pattern of the square of the difference between said converted known bit and said demodulated soft bit.